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**From:** Sauerhage, Maggie [Sauerhage.Maggie@epa.gov]  
**Sent:** 5/23/2019 8:28:48 PM  
**To:** OCSPP Daily Clips [OCSPP-Daily-Clips@epa.gov]  
**Subject:** OCSPP Daily Clips: 5/23/19

[Bloomberg Environment: EPA Updating List to Help Chemical Makers Avoid Animal Testing](#)

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**Bloomberg Environment**

**EPA Updating List to Help Chemical Makers Avoid Animal Testing**

<https://news.bloombergenvironment.com/environment-and-energy/epa-updating-list-to-help-chemical-makers-avoid-animal-testing>

**By Pat Rizutto**

- EPA updating list of alternative tests meeting chemical law's criteria
- Also to propose process to add new tests

The EPA plans to soon update its list of acceptable tests that don't involve live animals like rabbits or mice, which chemical makers can use to examine the toxicity of their products, an agency official said May 23.

The Environmental Protection Agency is updating the list of alternative chemical test methods it released in June 2018 to comply with the 2016 Toxic Substances Control Act amendments, said Steven Snyderman, an environmental protection specialist at the agency.

Companies don't have to use the toxicity tests on the EPA's list. But the [list](#) can help chemical manufacturers evaluate the safety of their compounds by using tests that meet TSCA's criteria, the EPA says. That means the EPA has concluded the listed tests produce scientifically "reliable" and "relevant" information about the health or ecological issues being investigated.

The tests on the EPA's list don't typically use animals, but in some cases rely on spineless fauna such as earthworms or water fleas.

The EPA also will soon propose for public comment a process for nominating alternative tests to include on the list, Snyderman told a [committee](#) of federal agencies that discussed their efforts to increase their use of data from tests that don't rely on animals.

That process could interest chemical manufacturers that develop in-house tests as well as academic researchers and companies, such as Genentech Inc. and Biomatrix Inc., that develop tests.

For example, Procter & Gamble Co. helped invent three non-animal skin tests that can be used to develop data for the EPA's chemicals or pesticide programs.

**The Daily Californian**

**UC system suspends glyphosate herbicide use in light of student campaign**

<https://www.dailycal.org/2019/05/23/uc-system-suspends-glyphosate-herbicide-use-in-light-of-student-campaign/>

**By Sabrina Dong**

UC Berkeley alumna and former Cal beach volleyball player Mackenzie Feldman and her former teammate and campus senior Bridget Gustafson spoke out against the use of glyphosate-based herbicides on campus in fall 2017. Almost two years later, on May 14, UC President Janet Napolitano issued a temporary suspension, with several exceptions, on the use of glyphosate-based herbicides at all UC locations because of health concerns and ecological hazards.

According to the U.S. Environmental Protection Agency, or EPA, website, glyphosate is a widely used herbicide that controls weeds and grasses. Though the EPA fact sheet classifies glyphosate as having “low oral and dermal acute toxicity” and places it in Toxicity Category III — the second-lowest toxicity level — according to Feldman, lawsuits against Monsanto’s glyphosate-based Roundup weed killer product indicate that the product has harmful health effects, including cancer.

A society and environment major with a minor in food systems, Feldman was first alerted to the possible harmful effects of glyphosate at her home in Hawaii, where she said it was used as part of the prevalent industrial agriculture.

“It goes into the groundwater; it’s now found in the rain and in women’s breast milk. It’s everywhere,” Feldman said.

Health risks, in addition to ecological hazards and potential “legal and reputational risks” associated with glyphosate, were cited as reasons for the UC-wide suspension in Napolitano’s May 14 memo, which said the suspension will go into effect June 1.

According to the memo, the university is considering longer-term approaches to the use of the herbicide and other pesticides, and this suspension may be changed or terminated after “expert review.”

“UC staff applying these herbicides shall either possess a valid license or certificate (applicable to the operation in question) from the California Department of Pesticide Regulation or receive appropriate training and/or direct supervision by a person thus licensed or certified,” the memo said.

The memo went on to include that UC staff members who apply the herbicides will have to follow all applicable protection recommendations from the herbicide manufacturer, the UC location and the health and safety department.

According to the memo, the exceptions to the suspension include agricultural operations, fuel-load management programs to reduce wildfire risk, native habitat preservation or restoration activities, and research that requires glyphosate-based herbicides.

“We are encouraged that the UC President and Regents have made the decision to stop using glyphosate on UC campuses, but there is no need to wait for more research to make the ban permanent,” Feldman said in a press release from Food & Water Watch.

Feldman’s journey began in 2017, when she and Gustafson approached Casey Cox, the athletics fields and turf supervisor, about the use of herbicide at the beach volleyball facility at Clark Kerr Campus. According to Cox, after gaining an understanding of their concerns, the decision was made to permanently discontinue using it at the beach volleyball facility.

Head beach volleyball coach Meagan Owusu said she fully supported the girls’ decision to go to the administration about the issue. Owusu said part of the issue in stopping glyphosate use was that there were not enough staff members to pull out the weeds manually.

"So then Bridget and Mackenzie came back to me and reported how the meeting went, and they said they would take full responsibility and have the team go out and pull weeds on their spare time," Owusu said. "I supported it, but they took full responsibility and full ownership of the execution."

Feldman is now continuing her work to stop the use of herbicides through her leadership with the Herbicide-Free UC campaign. According to Feldman, her goal is to expand this project to every college in the nation.

Although it was not her plan to expand the campaign after graduation, Feldman said she realized it was necessary.

"It's not just about the bees and the environment. It's about the people who are most exposed. The issue is very connected and has a lot to do with environmental practice," Feldman said.

## **E&E News**

### **Republicans, industry push back on PFAS bills**

<https://www.eenews.net/eedaily/2019/05/23/stories/1060381793>

Ariana Figueroa, E&E News reporter

Republicans and chemicals industry advocates are pushing back on a frenzy of bills to address drinking water contamination.

The Senate Environment and Public Works Committee reviewed six bills dedicated to addressing per- and polyfluoroalkyl substances, or PFAS.

The chemicals were used to make nonstick cookware, food packaging and firefighting foam, among other products. PFAS is now linked to cancer, thyroid issues and other health problems, according to research from the Centers of Diseases Control and Prevention.

Chairman John Barrasso (R-Wyo.) said several proposals — including one to compel the administration to establish strong rules against PFAS — concerned him.

"I am concerned about side-stepping the rulemaking process used to assess the risks associated with chemical compounds under our nation's bedrock environmental laws," he said in his opening statement.

Democrats have been at the forefront of many of the bills, but the drive to deal with PFAS is generally bipartisan. The EPW Committee hearing focused on the following six:

- S. 638, the "PFAS Action Act," from ranking member Tom Carper (D-Del.). It would require EPA to designate PFAS as hazardous substances under the Superfund law.
- S. 950, the "PFAS Detection Act," from Sen. Debbie Stabenow (D-Mich.). It would require the U.S. Geological Survey to carry out nationwide sampling of PFAS in the environment.
- S. 1251, the "Safe Drinking Water Assistance Act," from Sen. Jeanne Shaheen (D-N.H.). It aims to improve collaboration between states and the federal government.
- S. 1372, the "PFAS Accountability Act," also from Stabenow. It would set requirements for PFAS cleanup at federal facilities.
- S. 1473, the "Protect Drinking Water from PFAS Act," from Sen. Kirsten Gillibrand (D-N.Y.). It would push EPA to set limits for PFAS.
- S. 1507, the "PFAS Release Disclosure Act," from Sen. Shelley Moore Capito (R-W.Va.), would include PFAS in the inventory of toxic releases.

Barrasso said more research needs to be done to determine which chemicals pose a risk to health and ones that are deemed safe.

"I question whether we should treat all PFAS as if they posed the same level of risk to human health and the environment," he said.

Rep. John Shimkus (R-Ill.), ranking member of the Energy and Commerce Subcommittee on the Environment and Climate Change, made similar arguments during a hearing last week (*E&E Daily*, May 16).

He urged House Democrats not to rush and force EPA to set an enforceable drinking standard for an entire class of chemicals, arguing Congress could unintentionally ban some compounds that potentially pose no threat to human health.

During yesterday's EPW Committee hearing, a witness from the American Chemical Council agreed with Barrasso. Kimberly Wise White, ACC senior director for chemical products and technology, argued PFAS chemicals require different levels of regulation because of the different structures and properties.

"A one-size-fits-all approach to chemical management and assessment of PFAS is not scientifically based," she said.

Lisa Daniels, director of the Pennsylvania Department of Environmental Protection's Bureau of Safe Drinking Water, disagreed with studying PFAS on a compound-by-compound basis and instead advocated for additional funding for states to deal with testing and cleanup.

Daniels said states are diverting funding meant for inspections, training and enforcement for drinking water programs to address PFAS such as setting maximum contamination levels.

Carper said he was not surprised states are moving forward with setting their own PFAS standards and accused EPA of lowering its draft guidance for PFAS cleanup.

"EPA weakened its draft guidance for cleaning up contaminated PFAS sites following pressure from the Department of Defense," Carper said in his opening statement.

At the end of the hearing, Barrasso said he hopes to put together a bipartisan PFAS package by the end of this Congress but did not give a definitive date.

In the House, Environment and Climate Change Subcommittee Chairman Paul Tonko (D-N.Y.) said he is also working on a bipartisan PFAS package that he is aiming to pass before the August recess (*E&E Daily*, May 7).

## **The Guardian**

### **Why you need to know about PFAS, the chemicals in pizza boxes and rainwear**

<https://www.theguardian.com/us-news/2019/may/23/pfas-everyday-products-toxics-guide>

**By Lauren Zanolli**

What are PFAS?

PFAS, short for perfluoroalkyl and polyfluoroalkyl substances, are a group of at least 4,700 synthetic chemicals that have been in commercial production since the 1940s to make surfaces resist stains, water and grease.

The most widely studied are PFOA (also known as C8) – used for decades to make Teflon non-stick – and PFOS, used to make Scotchgard water repellent.

They don't break down. PFAS are highly persistent and accumulate over time in humans, animals and the environment. They can also be dispersed through air and water and have been found in the environment of the Arctic (and its polar bears) and open ocean waters.

What can PFAS be found in?

It can be found in non-stick cookware, fire retardants, stain and water repellents, some furniture, waterproof clothes, pizza boxes and take-out containers, food packaging, carpets and textiles, rubbers and plastics, electronics and some dental floss.

People around the world. The Centers for Disease Control and Prevention (CDC) found PFOA in the blood of 98% of Americans, as well as in breast milk and umbilical cord blood.

The drinking water of about 16 million Americans, including 126 military bases, where PFAS-rich firefighting foam is used for training exercises. PFAS have also been found in fish, shellfish, vegetables and other grown in contaminated soil or water. The Environmental Working Group health advocates have created a US map of detections of PFAS in water.

Can PFAS cause harm?

Health effects of the various kinds of PFAS are debated, but a growing body of evidence has linked exposure to some of them to:

Developmental issues, cancer, liver damage, immune system disruption, resistance to vaccines, thyroid disease, impaired fertility and high cholesterol. PFAS have been dubbed “possibly carcinogenic” to humans by the Environmental Protection Agency (EPA) and the International Agency for Cancer Research (IARC).

A study funded by DuPont as part of a legal settlement with employees at one of its Teflon facilities found that PFOA was probably linked to six disease outcomes: kidney cancer, testicular cancer, thyroid disease, ulcerative colitis, high cholesterol and pregnancy-induced hypertension.

Numerous studies on PFOS and PFOA on both humans and animals have shown a wide range of possible health effects, including decreased fertility among women, decreased sperm count and penis size, lowered birth weight, cancer and – among animals studied – death.

How can consumers limit any risks?

Exposure to PFAS comes mainly from drinking contaminated water, eating food packaged in certain materials, or using products embedded with PFAS.

Avoid non-stick cookware, Gore-Tex fabric and clothing made with pre-2000 Scotchguard, and personal care products containing PTFE or fluoro ingredients. When in doubt, ask manufacturers if their products contain PFAS since they may not be labeled.

Ask your local health department if your water is contaminated above EPA-specified levels, and stop using it if so.

Watch out for local fish advisories and don't eat contaminated catches.

How are PFAS regulated?

The federal government does not regulate PFAS.

Amid growing public concern, the EPA announced in February it would begin the process of regulating PFOA and PFAS in the next two years (these regulations, if issued, would not apply to other PFAS chemicals).

Some states with high exposure, including Washington, are pushing their own regulations and bans.

PFOS and PFOA have been largely phased out of use in the US under a 2006 voluntary agreement brokered by the EPA with eight major companies, including DuPont. However, these substances are still circulating in the country via imports. Research on the chemicals used to replace PFOA – including GenX, which is produced by DuPont spinoff Chemours – is limited. A 2018 draft assessment by the EPA noted animal studies showing effects on the kidneys, liver, immune system and more from GenX. Chemours is currently under legal pressure for alleged GenX contamination around its North Carolina facility, and is currently under a state consent order that includes a \$12m fine and requirements to accelerate clean-up efforts. Chemours website says GenX technology “reduces the potential for environmental release and exposure ... extremely low or no extractable water-soluble residuals in finished polymers and end-use articles”.

In the EU, where PFAS use and manufacture is much lower than the US, PFOS is regulated as a persistent organic pollutant, and more regulations are expected to kick in next year.

Canada has declared PFOS a toxic substance and prohibited its use and import.

#### **Milwaukee Journal Sentinel**

#### **Gov. Tony Evers backs legislation regulating emerging contaminants known as 'forever' chemicals**

<https://www.jsonline.com/story/news/politics/2019/05/23/tony-evers-backs-bill-regulate-forever-chemicals/1197045001/>

**Lee Bergquist, Milwaukee Journal Sentinel**

GREEN BAY - An emerging class of toxic chemicals is getting more attention in Madison as worries about contamination from the compounds is growing in Wisconsin.

Gov. Tony Evers, a Democrat, said Thursday he was supporting legislation to give state regulators more enforcement powers over the chemicals.

Also, two Republican legislators — Rep. John Nygren of Marinette and Sen. Rob Cowles of Green Bay — indicated that they would be advancing a more limited bill that would curtail the use of the chemicals in firefighting foam.

The legislation is coming amid rising national concerns about a group of compounds known as perfluorinated chemicals, sometimes called “forever chemicals” because of their difficulty to break down in the environment.

Frustrated that federal regulators are not moving fast enough to establish standards that would limit amounts that humans could be safely exposed to, states are now taking matters into their own hands.

In Wisconsin, in the most high-profile known case of contamination, Tyco Fire Products, a unit of Johnson Controls International of Glendale, is in the midst of an extensive cleanup in Marinette, where Tyco produces firefighting foam and operates a testing center.

The legislative district that Nygren represents includes Marinette. Tyco is a large employer in the city.

The fire retardant contains the chemicals. Perfluorinated chemicals, sometimes referred to as PFAS, have been used in a wide range of other products.

While dozens of different chemicals are being detected in water, soil and in the air, two of the key compounds are perfluorooctanoic acid, or PFOA, and perfluorooctane sulfonate, or PFOS.

In Marinette, beginning in late 2017, the chemicals have been found in private wells and offshore in Green Bay.

They have also been found at military sites, including in groundwater at the Air National Guard 128th Air Refueling Wing in Milwaukee and at Truax Field in Madison.

Evers appeared in Green Bay with Preston Cole, secretary of the Department of Natural Resources, to express his support for legislation from Democratic lawmakers whose bill would give the DNR more powers to regulate the chemicals.

“We have a proud history of manufacturing in Wisconsin,” Evers said. “It’s even on our great state flag. Sadly, some substances used in the manufacturing processes are polluting the earth and making people sick.

“Some of those issues in those contaminants include legacy contaminants such as PFAS, which can lead to a number of health issues from liver damage to birth defects.”

The Democratic bill, patterned after measures in other states, would allow the DNR to set limits on allowable concentrations in drinking water, groundwater, surface water, air, soil, solid waste and sediments of public waterways.

A key requirement would allow state officials to speed up regulation by allowing the DNR to set interim standards that would go into effect after passage.

On a separate track, the regulations would go through the state's formal rulemaking process, which can take two or three years.

The Democratic bill would also require that parties that possess the chemicals show that they have the financial wherewithal to pay for a potential cleanup. It would also add 7.5 positions at the DNR to address contamination issues and four positions at the state Department of Health Services, including a position of research scientist. One sponsor, Sen. Dave Hansen of Green Bay, said citizens have been frustrated by what they see as a slow response from the state.

Now, Republicans, who control the Legislature, and Democrats are taking up the issue in different way, with Democrats pushing for more state oversight.

"I think it's time for people to come together," Hansen said. "This is one issue that we should be able to work together on."

The Department of Health Services has been reviewing dozens of chemicals, some for more than a year, to determine a safe exposure level.

Separately, the U.S. Environmental Protection Agency is reviewing potential standards but has not established limits for the chemicals.

In November 2016, the EPA issued a lifetime health advisory of 70 parts per trillion, which is not legally enforceable for PFOA and a PFOS.

The Republican bill is taking a less restrictive tack. It would limit the use of firefighting foams that contain the compounds, known as Class B foams, but would allow exceptions for first responders and fire departments.

The foams could be tested, as Tyco does, but only if done safely.

"We support bills like the one Representative Nygren proposed because they allow military and civilian firefighters to continue to use these foams for real-world highly hazardous fires," said Tyco spokesman Fraser Engerman, director of global media relations for Johnson Controls.

Engerman said that Tyco's foams contain a fluorinated surfactant that may contain trace amounts of PFOA.

## **The Washington Post**

### **Mysterious spike of ozone-destroying chemical is traced to east China**

[https://www.washingtonpost.com/national/health-science/mysterious-spike-of-ozone-destroying-chemical-is-traced-to-northeast-china/2019/05/22/a434150a-789f-11e9-b3f5-5673edf2d127\\_story.html?utm\\_term=.69a0342f10b5](https://www.washingtonpost.com/national/health-science/mysterious-spike-of-ozone-destroying-chemical-is-traced-to-northeast-china/2019/05/22/a434150a-789f-11e9-b3f5-5673edf2d127_story.html?utm_term=.69a0342f10b5)

**By Joel Achenbach and Brady Dennis**

A troubling spike in emissions of a globally banned chemical that damages the Earth's protective ozone layer has been traced to two provinces in eastern China, according to a study published Wednesday that has alarmed scientists who monitor the planet's atmosphere.

The study, published in the journal Nature, comes one year after another report revealed that air samples had shown a startling excess of a type of chlorofluorocarbon known as trichlorofluoromethane, or CFC-11, since 2012.

This manufactured chemical, once widely used to blow polyurethane into a rigid insulating foam, leaks into the air and destroys ozone molecules in the upper atmosphere. The ozone layer is critical to life, limiting the amount of harmful ultraviolet solar radiation that reaches the planet's surface. CFC-11 is also a potent greenhouse gas, with roughly 4,750 times the heat-trapping potential of carbon dioxide.

The new report underscores the need for enforcement of international environmental agreements even when the hazards are clear and profound. And it is a reminder that China's intensifying environmental challenges have global consequences.

"This is a huge problem," a State Department official said Wednesday. The official said the department plans to review the report but has not yet concluded that China is the source of the new emissions.

"If it's a problem in another country, we're also going to be suffering," the official said.



Barrels containing CFC-11 are seen at Dacheng Desheng Chemical in China's Hebei province. (Environmental Investigation Agency)

Any production and use of CFC-11 is a violation of the Montreal Protocol, a 1987 agreement that phased out such chemicals in favor of ones that do not damage the atmosphere. The global accord was reached after scientists revealed the existence of an expanding hole in the ozone layer over Antarctica.

Last year's report did not identify the source of the new emissions beyond saying it is most likely they came from eastern Asia. But authors of the new report identify the provinces of Shandong and Hebei in eastern China as the likely source for at least 40 percent of the emissions.

The researchers based their conclusion on air samples from monitoring stations in South Korea and Japan. Those sampling stations, which feature instruments that can tease out the molecular components of the air, showed periodic spikes in CFC-11. The researchers combined that data with weather forecasts and observations of wind patterns and ran a series of computer models to pinpoint the most likely origin of the emissions. The results pointed to the two Chinese provinces.

"When the wind is blowing in a straight line from that source to the measuring station, you see a spike," said lead author Matt Rigby, an atmospheric scientist at the University of Bristol.





THE WASHINGTON POST

"We hope to work with Chinese colleagues in the future to see if similar signals are visible in their data," Rigby said.

The Montreal Protocol is often held up as a model of global cooperation in protecting the environment, and for what nations can do collectively to combat climate change — another tragedy-of-the-commons crisis, driven by the burning of fossil fuels and other human activity.

The parties to the protocol were alarmed by last year's report and called for "urgent action."

"We cannot relax our vigilance for a second. We cannot let this go unaddressed," Tina Birmpili, head of U.N. Environment's Ozone Secretariat, said over the summer.

The protocol has largely worked as intended, and the authors of the new report reiterate that central message: The ozone layer continues to recover despite the evidence of new emissions.

The problem is that the recovery may be happening more slowly than expected. Levels of CFC-11 in the atmosphere have not declined as rapidly as computer models predicted they would.

There might have been relatively benign explanations. A great deal of CFC-11 is already "banked" in the built world, in the form of insulation that gradually leaks the gas into the atmosphere. Rigby and his colleagues looked at the possibility that new construction, and the replacement of building stock and destruction of older infrastructure, could have released the chemical into the air.

But the numbers didn't add up. The most likely explanation is new production and use of the chemical, he said.

Rigby said that the new emissions of CFC-11 have the global warming equivalent of all the carbon dioxide emitted annually by human activity in London.

Stephen Montzka, a National Oceanic and Atmospheric Administration scientist and co-author of Wednesday's study, as well as the 2018 report, said the latest findings leave important unanswered questions. While researchers traced roughly half of the troubling CFC-11 emissions to the two provinces in China, details about the source for other emissions remain elusive.

"The guessing game is now: Where is the other half coming from?" Montzka said, noting that the study only detailed emissions in a limited region of China that encompasses about a third of the nation's population.

The spike in emissions of CFC-11 raises other questions about why anyone would still manufacture it. The short answer is that CFC-11 is favored by some companies because it is cheaper and more effective than climate-friendly alternatives.

That's the conclusion of an investigation published last year by the Environmental Investigation Agency, a Washington-based environmental watchdog group.

The researchers talked with representatives of 18 companies in 10 Chinese provinces who acknowledged their use of the banned chemical. A half-dozen of those companies were in Shandong and Hebei.

After last year's disclosure of new emissions, Chinese authorities cracked down on illegal use of CFCs, seizing 29 tons of chemicals and closing some rogue factories, according to Avipsa Mahapatra, who works for the watchdog group.

But she said the Nature paper indicates that this seized material represents only a fraction of what's being produced and used.

"We are just beginning to understand the scale of the problem," she said.

Montzka said he was puzzled by the return of CFC-11 since its phaseout in 2010.

"There's a chance that we've only seen the tip of the iceberg so far," he said. "If what we've detected is actually only a small fraction of the additional new, illegal production that's happened since 2010, then the problem could be larger than what we've detected so far."